(See attached revised curriculum with total hours in the Annexes).

At the end of the curriculum review it was pointed out that writing curriculum is a specialised task. It had taken PIPOS over 10 years to create its present curriculum which they were continously improving. An academic committee should be created to review the curriculum changes that might be required in the future. The finished curriculum should be forwarded to ISPO for review and comparison with other curricula.

4.6 Teaching Materials
A list of books was presented to the group – 6 of the 10 had been translated into Pashtu and 4 out of 10 into Dari by CDAP translators. CDAP no longer had a translation department and had passed the books over to SGAA. The senior technicians of SGAA were checking the translations but there were many mistakes as the translators had not understood the technical terms involved. There was a need to find good medical/orthopaedic translators. SGAA requested the group to forward names of good medical translators in Kabul and elsewhere to continue the work.

4.7 Procedure for Upgrading
There was lengthy discussion about this. The group was shown the existing list of 64 plus technicians whom their organisations wished to upgrade. The group felt it was difficult to make an entry exam and assess the level of existing technicians when there was such a variety of educational levels and work experience. The best way of assessing existing technicians would be an individual assessment by an agreed team of examiners (for example ISPO, ICRC, SGAA), who would visit the work place of each technician. Then recommendations could be made on which areas each technician required upgrading to the recognised level. The upgrading could be carried out by each organisation itself or could be provided in modular courses in several locations. There should be a fixed time span given to these technicians to allow them to sit the final exam for the recognised level of orthopaedic technician and to be assimilated into the national structure. After this only orthopaedic technicians studying the recognised national course would be allowed to sit the exam.
The examining team could also grade existing technicians as ISPO Grade 3/4 – bench technicians.

4.8 Entry Qualification
There was a general discussion about the danger of lowering the standard of the technicians by allowing female candidates to apply for regular training without 12th grade. The same standard should apply to women as men. For the upgrading training the qualification remained as mentioned above, for those with at least 5 years experience in a workshop.

4.9 New Position after Training
Regular and Upgrading Training – Category 2 ISPO – that is a technician qualified to prescribe, fabricate and fit appliances to a patient.

4.10 Technical Job Description
According to the Professional Profile for Category 2, ISPO.

4.11 Upgrading Candidates
The list for upgrading candidates had been compiled by CDAP in January 2001. This should be updated by the agencies (64 were originally listed). Handicap International Belgium said that they had some technicians they wanted to include.

4.12 Changes in the Orthopaedic Technology and Standardisation of Components and Mobility Aids.
The group said that standardisation of orthopaedic technology could not be forced on the individual members, it was impossible (and not necessarily desirable) to have a uniform product all over Afghanistan. Nonetheless, a minimum level of quality was important and to help achieve this continued standardisation of components was recommended. This also could decrease problems faced by workshops when patients came for repairs and the relevant components were not available in different locations in Afghanistan. The group recommended bulk purchasing of certain components (knee joints. polypropolene, sach feet etc) by the members from local suppliers in Afghanistan. Pakistan or Iran to improve quality and decrease prices. The investigation of supply possibilities in Iran should be discussed at the next taskforce meeting.

4.13 Report Format
SGAA presented its reporting format for the group to discuss. The idea was that a clear reporting format could be used for national statistics and internal reports. There was a need to know the patient numbers and ages and what types of appliances were produced and what types of pathologies seen. The group commented that the list of appliances should start from the foot upwards for both orthoses and prostheses. ISPO nomenclature should be used ie. bilateral amputee not double amputee.

4.14 Summary of Recommendations from Orthopaedic Technology Group.

1. Further changes needed to be made to the existing curriculum. It should finally be reviewed by an external body like ISPO.
2. The revised curriculum should be prepared and finalized at the next task force group meeting in April before submission to the Intermediate Institute of Medical Education, Kabul.
3. The group recommended that existing technicians who wished to be upgraded should be assessed individually by a team of examiners in their place of work or selected locations. The examiners would then recommend subjects/required areas for further training. The group recommended that the team include a recognised examiner from ISPO. All technicians could be given a certificate for Grade 3 or 4 by this team if the group members requested this. Funding of this team, however, would have to be found.

5. Promoting Psycho-Social Well being Among Children Affected by War.

Zubaida Mohsen

Save the Children Sweden runs a programme in the refugee camps to raise awareness about problems faced by children in emergency situations, such as armed conflict and natural disasters.

The programme trains the participants - parents, teachers and community volunteers - to promote the rights of children, to analyse the effects of conflict and emergency on children and to identify techniques for their rehabilitation.

Armed violence leads directly to heavy child casualties but the indirect toll is far heavier; children die from preventable diseases because of the lack of health services and they lose the protection of their families through death and separation.

Initially children may respond to traumatic events by becoming agitated, shaking and crying. It is a temporary paralysis of body and mind. Children of all ages want to remain close to their parents and any event that threatens separation increases their anxiety. Evacuation of children (away from the family and the community) has generally been found to be more traumatic for children than staying with their families in an endangered area. If children stay with their family group they recover more quickly psychologically.

The training programme uses the STOP model of intervention which is based on four key ideas - Structure, Talking, Organised Play, Parental Support.

Structure - encourage structures for the child such as schools, sports, clubs: these are vital islands of normal life in a chaotic world.

Talking – the child must be encouraged to talk and express himself; talking about his experiences begins the child's healing process.

Organised play - the ability to play is an important part of the child's rehabilitation therapy; it is a way to express the child's feelings non-verbally.

Parental Support – support must be given to the parents so that they can take better care of their children and in order to reduce the danger of splitting up the family further.

Conclusion

This psycho-social programme has been included in training courses for mid-level rehabilitation workers in the CBR programmes of CDAP. The conference members also felt that it is important to include psycho-social training with the basic principles of psychology and counselling skills in the training curricula of physiotherapists and orthopaedic technicians.

6. Reporting Formats for Statistics

Mohammad Ashfaq

A new type of reporting format was proposed to the group for collection of statistics. This could also be used as a clinical audit. SGAA produced a format whereby each physiotherapist lists the patients treated by disease, the number of treatments given and the number of treatment units at each treatment session.

The definition of a treatment unit is a number of physiotherapy procedures used per treatment, for example for back pain the treatment units can be hot pack, ultrasound, exercises or massage. When there is a change in the plan of treatment this should be recorded in the patient file.

To assess staff needs the statistics should state the number of working days and the number of staff treating patients in this period.

Conclusion
SGAA said it would test the format for six months in its physiotherapy centres and then report back to the group.

7. Post Polio Syndrome

Paddie Chanmugam

Polio is a widespread problem in Afghanistan and in Pakistan and is the major source of disability seen in rehabilitation services. SGAA has always had a good working relationship with WHO regarding the surveillance of patients with post-polio paralysis (PPP) in the eastern region of Afghanistan. SGAA has a register of over 4,000 PPP patients including those who have had vaccinations, those who have not had vaccinations and those who suffered PPP after antibiotic injections. SGAA also monitors patients suffering Acute Flail Limbs and refers them to the five WHO sentinel sites in Jalalabad for diagnosis.

SGAA cited current research articles on post polio syndrome that show new symptoms are appearing in patients who were infected with the polio virus many years before. These adult patients several decades later are now reliving their childhood symptoms of fatigue, pain and muscle atrophy so they are unable to carry out daily functional activities. This is known as post-polio syndrome (PPS). It is common for the PPP patient to suffer extra wear and tear of the joints because they do not have normal range of muscles, but new research shows a depleted motor neuron pool and residual biomechanical deficit in some aging PPP patients.

During the discussion after this presentation it was pointed out that wear and tear of the muscles and body is inevitable in polio patients and that in any case the life expectancy of Afghan and Pakistani polio patients must be shorter than those evaluated in developed countries.

Conclusion
In the Afghan context children between the ages of 10-15 years old should be closely monitored every six months to ensure that they are using their appliances, carrying out

their normal functional activities (ADL - activities of daily living) and going to school. They should be examined in order to check if there are any changes in the muscle strength of the upper limb or lower limb, and if they suffer additional pain or fatigue or if they are losing concentration.

Physiotherapists should prescribe endurance type exercises and not power exercises for older PPP patients. If the patient has clawing of the big toe (Hallus deformity) they should have a special orthosis made. All PPP patients that show signs of post-polio syndrome should be prescribed lighter orthotic appliances.

8. Investigation of the Probable Causes of Specific Childhood Disabilities in Eastern Afghanistan

Paddie Chanmugam, Dr Fazela Shinwari

A copy of this report was handed to all participants. The survey was funded by UNICEF and carried out from May 2000 to March 2001 to look at probable causes of cerebral palsy (CP), delayed development, club foot and congenital dislocation of the hip. The survey was conducted principally in Nangharhar province, where SGAA has several physiotherapy outreach clinics, and also in Laghman and Kunar provinces. 633 children under 12 years were examined by a medical team and a physiotherapist.

Final statistical analysis showed that the five most significant risk factors in CP were: a family history of disability, congenital factors (disability at birth), anaemia, hyperemesis gravidarum and trauma. The five most significant risk factors for delayed physical and mental development were: absence of ante-natal care, urinary tract infection, malnutrition, low birth weight and high fever.

The medical team that carried out the survey emphasised the need for improved ante-natal, peri-natal and post-natal care in eastern Afghanistan. Recommendations for ante-natal care included the establishment of more MCH clinics with neo-natal facilities to prevent neo-natal sepsis. MCH clinics also need to better distributed in the region to ensure more widespread ante-natal care and family planning should be encouraged. Dais or traditional birth attendants need to be upgraded and health-workers need to encourage women to have regular ante-natal care. MCH staff should also be encouraged to keep better history records of patients. An example was given of a mother who had had 9 pregnancies, 4 were miscarriages and 4 were born alive. 1 of these had CP. No doctor had every questioned her on her history of abortions or asked her if she had disabled children. The widespread abuse of oxytocine was also signalled in the findings.

Conclusions

As a general conclusion the authors warned that cases of severe CP seem to be increasing and that there would also be increasing numbers of malnourished children due to the drought and lack of food in certain regions of Afghanistan. As a result physiotherapy services should be prepared to see many more children suffering delayed physical and mental development because of poor nutrition. Surveillance of malnourished children should be conducted by physiotherapists working with malnutrition units in clinics and hospitals to monitor the development of these children up to the age of two years.

9. Teacher Training Programme

Judy Thoren

This curriculum was presented by IAM to the Institute of Intermediate Medical Education in June 1999. It is called Medical Teacher Training for the Intermediate Level for Afghanistan - Physiotherapy Teacher Component. It was the first formal curriculum for medical teacher training in Afghanistan and is designed for all health care training staff and medical teachers. Amongst other things it aims to train students how to teach, what teaching strategies to choose, how to develop a curriculum, what kind of curriculum is needed, how to teach practical skills, and how to effectively evaluate what students know.

The course is based on a modular system with eight modules of 694 hours which is the equivalent of one semester. These modules have to be completed within a two year period. Pre-entry qualifications require candidates with 14th level graduation (for physiotherapists) and 12th grade level graduation for other medical professions at intermediate level, (ie. nurses, orthopaedic technicians). At least two years working experience post-graduation was recommended for the candidates who wished to apply to this course.

Conclusion

There is a need for all regular physiotherapy students to have supervised clinical education but experienced physiotherapists are not necessarily able to supervise the clinical education. There is a real shortage of teachers to supervise clinical education and hence a shorter course to train clinical supervisors should be undertaken. IAM plans to start the next teacher training course in May 2002.

10. Afghan Physiotherapy Association

Razi Khan Hamdard

The association has had two meetings since the last national workshop and had provided a seminar on the McKenzie method of treating backs and necks. Additional courses on orthopaedics and neurology had been requested by the members. The association has not yet completed its Afghan registration. A sum of 40,000Rs has to be paid. They also need to pay an international registration fee to be members of the World Confederation of Physical Therapists (WCPT). While it was acknowledged that the Afghan members of APA must contribute to the association, the organisations present at the workshop were also asked to support the APA.

Recommendations

It was recommended that the APA pay the WCPT fee so that WCPT can recommend expert physiotherapists from their member states for training courses, and in order to obtain donations of new books and journals for provision in physiotherapy training centres. It was also recommended that the APA should prepare a career structure with grades for physiotherapy staff working in hospitals and in clinics for adoption by MOPH. Razi Khan also distributed assessment cards for each region of the body that he had developed for CDAP staff. These will be reviewed and discussed at the next task force meeting.

11. GENERAL CONCLUSIONS

Objectives of Workshop:

- **To review progress since last National Physiotherapy and Orthopaedic Workshop of May 2000.**
- **To coordinate training and services for war trauma victims, the disabled and the non-disabled.**
- **To assess future needs.**

Progress:
Services had continued to expand in Afghanistan but the group as a whole had not completed all the training and coordination tasks within the timeframe set by the previous workshop.

Training:
The members of the workshop said that the meeting had been useful for focusing on training needs and review of existing curricula.

The physiotherapy group felt that a 3-year training programme would be able to encompass all the subjects needed to be taught in order to produce a physiotherapist capable of being the first line contact with patients, particularly in rural areas where there are insufficient doctors. The orthopaedic technology group was encouraged to submit a similar 3-year curriculum to IIME along the lines of ISPO's category 2 technologist. This curriculum should be easier to register as it had some core subjects which could be shared with the physiotherapy curriculum.

The training priority for the orthopaedic technology group is to upgrade existing technicians to a recognized national standard.

The workshop emphasized there was a need for medical teacher training for both physiotherapy staff and orthopaedic technicians in order to run training courses without expatriate staff.

In March 2002 SGAA and IAM will start 2-year physiotherapy courses in Jalalabad and Kabul. SGAA will train 12 female and 12 male students.

Future Needs:
More 2-year trained physiotherapists are required in Afghanistan but no more physiotherapy assistants should be trained. The physiotherapy group suggested that two physiotherapists (one male, one female) per district and two physiotherapists per hospital would be a minimum requirement for Afghanistan. This gives a figure of 775 physiotherapists. 140 actually exist. MOPH has approved the need for one physiotherapist per district in their health structure. This figure is inadequate and will

need to be reassessed as the situation changes in Afghanistan. Discussions with MOPH will need to continue.

Certain areas in Afghanistan lack orthopaedic workshops (west and south). New actors in Afghanistan who want to work in rehabilitation should be encouraged to work in areas where services are lacking. The goal is to improve access to patients in rural areas through better referral links and better follow-up.

Next Task Force Meetings:

Physiotherapy curriculum meeting - April/ May 2002.
- To review 3-year curriculum as make adjustments.

Orthopaedic curriculum meeting – April 2002
- Review revised curriculum
- Review translation of materials.

Next National Meeting :
It was suggested that the group should try to work through the sectoral technical working groups (TWGs) in Kabul. The group should lobby for the creation of a sub-committee for disability under the Ministry of Public Health umbrella. CDAP had already contacted some members of MOPH. This sub-committee could organize the next National meeting to continue coordination of rehabilitation services for the disabled. Members from both task forces should follow up this task.

Suggested date of next National Meeting - October 2002.

4th National Workshop for Physiotherapy Services and Orthopaedic Technology in Afghanistan 27th February 2002

Objectives:

1. To review progress since last National Physiotherapy and Orthopaedic workshop of May 2000.
2. To coordinate training and services for war trauma victims, the disabled and the non- disabled.
3. To assess future needs for Afghanistan.

Agenda Day one

9.00 am	Opening Introduction and welcome	**SGAA** **Plenary**
9.10 am	Presentation on activities in 2001 and plans for 2002.	**All participants.**
10.45 am	Tea Break	
11.00 am 11.30 am	**Presentation on Report and Formats: (Wahadat/ Ashfaq)** **Physiotherapy Task force.** • Review of task force activities since last conference, • Conversion of two year physiotherapy curriculum to three year programme as recommended by Intermediate Institute of Medical Education, Kabul. Review the goals and objectives of the 3 year course and the subject to be added to the third year • Recognition of physiotherapy training by Ministry of Public Health, Kabul. • Training requirement for upgrading of 2 year PTs to 3 year PTs • Training requirement for upgrading of PTAs to 3 year PTs, • Need for upgrading PTs in specialist areas- Bobath approach to CP • Request to World Confederation of Physical Therapists to send • a consultant to assess the standards of the training schools • and the graduates working in different environments. **Orthopaedic Technology Task Force.** • Review of task force activities since last conference, • Procedure for upgrading of existing technicians. • Proposal to request an ISPO team to assess existing technicians for ISPO grades 4 and 3 through PIPOS, Peshawar. • Changes in Orthopaedic Technology, standardization of Components and Mobility Aids. • Reporting Format.	**Plenary** **Facilitators** **CDAP/IAM** **Group Work** **Facilitator** **SGAA** **Group Work**
12.30 Pm	Lunch Break	
1.30 Pm	**Continuation of group discussions**	**Group Work**
3.30 Pm	Tea Break	
4.00 Pm	**Review of discussion in each group and decisions made so far by facilitators**	**Plenary**
4.30 Pm	Close of first day	

4th National Workshop for Physiotherapy Services and Orthopaedic Technology in Afghanistan 28th February 2002

Agenda:- Day Two

9.00 am	Introduction and welcome -SGAA	**Plenary**
9.10 am	Presentation:- Promoting Psychosocial well- being among children affected by War. Zubaida, Physiotherapist and trainer.	**Plenary** **SC-S**
10.00 am	**Working Groups reconvene:**	**Group Work**
11.00 am	Tea Break	
11.30 am	Facilitators present working group discussions and recommendations to the general conference and the follow up required.	**Plenary**
12.30 Pm	Lunch	
1.30 Pm 2.00 Pm	**Reporting Formate** **Eradication of Polio - Post Polio Syndrome.** Research in U.S.A and Europe has shown that there is a need to follow-up polio children to observe further symptoms of inability to function, in daily activities.	**Plenary** **SGAA**
2.30 Pm	**Investigation of the Probable Causes of Specific Childhood Disabilities In Eastern Afghanistan** \ Ms.Paddie Chanmugam	**SGAA**
3.15 Pm	**Tea Break**	
3.30 Pm	**Afghan Physiotherapists Association**	**CDAP**
4.00 Pm	Any other Business.	
4.30 Pm	**Discussion of Objectives** for next conference. Conclusion. SGAA	**Plenary** **SGAA**

1. Introduction

Fiona Gall

In the last six months in Afghanistan there have been many changes – a new interim government, new promises of funding from the international community and the potential return of many Afghan refugees to Afghanistan.

It is an important time for those of us working in field of physiotherapy and orthopaedic technology to look at the services we are providing and prepare for future needs together.

Today we have no precise idea of how many people in Afghanistan and in the refugee camps in Pakistan and Iran are physically disabled. The standard international figure quoted is 4% of the population; this would mean 1 million disabled Afghans in an estimated population of 25 million in Afghanistan and 160,000 disabled Afghans in an estimated population of 4 million refugees in Pakistan and Iran. This would include all types of disability – deaf, blind, physical and mental. The percentage is probably higher in Afghanistan because of casualties due to landmine injuries and physical disabilities due to the low level of health care such as post-poliomyelitis and tuberculosis of the spine. At the moment in Afghanistan there is no national data collection for disability except for landmine injuries.

As agencies we have a responsibility to provide clear relevant data in order to help the government and health services plan future needs. From statistics provided by agencies for this meeting we can see that the number of physically disabled Afghans treated in 2001 was over 59,000 (see table).

WHO mentions in its health sector strategy for 2002 that because of the conflict in Afghanistan thousands of unexploded landmines and ordinances still need to be cleared and Afghans will continue to be injured physically and suffer mental stress. Every Afghan family has been touched in some way by the war and loss of injury of their family members.

So the needs are enormous. WHO suggests increased access for patients requiring physiotherapy and orthopaedic workshop services of 5% per year and increased availability of community rehabilitation services. Can we achieve this as a group? Do we have the capacity to increase services when qualified personnel are lacking?

Disability is high on everyone's agenda but donors and the UN have been patchy in their support of rehabilitation services which are costly and take time to build up. In the past two years many of us have struggled to find support for our activities. Even at the moment UNCDAP which runs a successful and large-scale CBR programme together with partners such as Swedish Committee for Afghanistan is facing lack of funds and support from its head agency UNDP. The Ministry of Health in Afghanistan is certainly not in a position take over services for the disabled and will need partners with which to collaborate in this field for the next 20 years.

Information on Rehabilitation Services

Afghan Physiotherapy Personnel

No	Province	Physiotherapy Personnel PT/PTAs
1	Balkah (Mazar)	10
2	Baghlan	2
3	Samangan	4
4	Kunduz	4
5	Takhar	10
6	Badakhshan	3
7	Kabul	20
8	Wardak	7
9	Logar	4
10	Ghazni	5
11	Kandahar	17
12	Nangharhar (Jalalabad)	18
13	Herat	10
14	Farah	6
15	Baluchistan	6
16	N.W.F.P	13
	Total	**139**

Locations of Orthopaedic Workshops

Workshop	Agency	Technicians
Mazar	SCA/CDAP	6
Mazar	ICRC	14
Taloqan	SCA	11
Faizebad	ICRC	10
Gulbahar	ICRC	5
Kabul	ICRC	23
Kabul	Military Hospital	8
Ghazni	SCA/CDAP	8
Khost	KJRC	4
Kandahar	Guardians / HI Belgium	18
Jalalabad	ICRC	12
Jalalabad	SGAA	13
Heart	ICRC	13
Quetta	MCI	8
Peshawar	PIPOS	6 (Pakistani)
	Total	**159**

February 2002

Sandy Gall's Afghanistan appeal
Revision of Third National Work shop Task Force Orthopaedic Section

No	Issues	Agreement	Future Action
1	**Training** ➢ ***Regular*** For New Comers and trainees worked for less than four years.	Will be upgraded (Two years) theoretical training + one year Intern ship for O/P. 6 Month for each of disciplines.	
	➢ ***Upgrading***	Six Months theoretical course. For those have worked experience six years and above Able to make Prosthesis and Orthosis from start to end. Full Practical skill as technician.	
2	➢ **Curriculum** ***a) Regular Training .***	Two years theoretical and practical training course. One year internship in O/W.	
	b) Upgrading Training.	Six Months theoretical course.	
3	➢ **Teaching Matirials**	1. The lower limb.O/P technical subjects from Cambodia Georgia books. 2. Medical related subjects from curriculum IAM of Kabul. 3. Maths ,English and religion study. 4. The ICRC have to prepare the related materials for the subjects.	
4	➢ **Procedure for Upgrading**	1. Rather partially centralized 3 to 5 best O/W in the country. 2. Identify/ Priorities the list of technician from the list prepared by CDAP. 3. One upgrading/year. 4. Preparing timetable for basic education in three categories . Poor Good V.Good (6-9) (9-12) (12above) 5. Questionnaire should be developed for theoretical know ledge of technician.	All the agencies should plan to start .

5	➢ **Entry Qualification** *a) Regular training.* *b) Upgrading training*	12th grade graduation is compulsory for new male comers. For new female candidates some flexibility would be advisable. For those have worked experience six years and above able to make O/P from start to end .Full practical skill as technician 12th grade graduation or get exemption or equalization certificate from IIME .	
6	➢ **New Position after** *a. Regular Training* *b. Upgrading Training*	The students who have succeeded in the final exam are awarded the degree of Orthopaedic technician (Grade two ISPO) The same as above.	
7	➢ **National Recognition**	The IIME increased religious subject hours from 50 to 75 per semester. The IIME demanded incentive for its own additional / administration staff. The group did not agree with the decision the curriculum should be signed unconditionally the qualified teacher from IIME can be hired for this training and used the IIME wage scale .	The decision should be revised in future.
8	➢ **Technician Job Description**	SGAA presented the copy of the professional profile for category II from ISPO.	The profile should be discussed.
9	➢ **Upgrading Candidates**	Different agencies introduced the list of the candidates. Agencies Male Female ICRC 30 2 CDAP 8 1 SGAA 5 3 KJRC 4 0 GUARDIANS 9 2 Total 56 8	
10	➢ **Common Reporting Database on O/W.**		All sides should be aware of each others activities and should be discuss.
11	➢ **Involvement of PIPOS in the training.**	The involvement of those agencies which have activities in Afghanistan should be involve in the training Individual agencies can still continue work with PIPOS on bilateral arrangement .	

Summary of the physiotherapy task force meetings since May 2001.

No	Issues	Agreement	Future Plan
1	National Recognition	A letter PSK is Submitted to MOPH and they agree to accept physiotherapy is their administrative structure	IAM,CDAP and APHA need to take forward the issues with MOPH
2	Training Materials	1. It was decided to share the available material through the list also a partial list was made and shared during the meeting. 2. It was also planned that SGAA will provide 3 book to CDAP and they will translate it.	1.The comprehensive list form every organization is needed. 2. Still there is a big need that all of us should translate and print more training and reference material for the country.
3	Charges of services to NON- Disabled clients.	It was generally decided that charges is a good strategy for sustainability but require more work by the individual organization.	We should re think about this issuers in this workshop
4	Input to Afghan Physiotherapy Association	It was decided that a formulation meeting would be arranged. According to the responsibility which was given to CDAP and IAM . we arranged a conference of the afghan physiotherapy Association and totally 55 physiotherapy personnel form all over the country participated in the conference.	The APHA activities are very week and there is a need for the consultancy from the organization involve in the field of disability or physiotherapy.
5	Statistics.	It was decided that various organization can use various forms according to their needs and it will be discussed in future	We need to do some thing more about this issue.

Curriculum for Grade 2 Orthopaedic Technicians

Afghanistan

Comparison with Cambodia Technician Grade 2 course and PIPOS CAT 2

Subject	Combodia	Afghanistan	PIPOS	Reduce
Religious Study		96	40	
English		150		
Genral Anatomy/Physiology		197	80	
Pathology/Anatomy	90	Pathology120	Pathology/40 Anatomy/40	
Mathematics	40	40	80	
Physic/Mechanic	40	40	80	
Material Technology	24	40	80	
Physiotherapy		34		
P/O Theory	310	312		
Workshop Manegment		40	40	
P/O Practical		1487	2405	
Workshop Technology		80	160	
Technicical Drawing		80	160	
Clinical Orthopeadic			40	
Bio Mechanic			200	
Functional Anatomy/Pathology			80	
Total Hours	**504**	**2716**	**3525**	

1st year 1358 hours 2nd year 1358 hours
Practical 523 hours Practical 964 hours
Theoritical 835 hours Theoritical 394 hours
3rd Year is internship in an Orthopaedic workshop 1420 hours/ Practical

Prepared by
Qamer Gul
SGAA

Draft OutLine Prosthetic and Orthotic Course for Aghanistan

Time Table of Subjects Hours and Semester for O/P

Subjects	Semester 1	Semester 2	Semester 3	Semester 4	Total
Religious Study	48	48	50	0	**146**
English	50	50	0	0	**100**
General Anotomy / Physiology	122	75	0	0	**197**
Mathematics	40	0	0	0	**40**
Physics	40	0	0	0	**40**
Material Technology	40	0	0	0	**40**
P/O Theory	81	81	80	70	**312**
Workshop Technology	80	0	0	0	**80**
P/O Practical	178	345	415	549	**1487**
Technical Drawing	0	80	0	0	**80**
Pathology	0	0	80	40	**120**
Workshop Management	0	0	40	0	**40**
Physiotherapy	0	0	14	20	**34**
Sub Total	**679**	**679**	**679**	**679**	**2716**

Prepared by
Qamar Gul
SGAA
12th April 2002

Semester One

Subject	Weeks																		Total Hours
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Religious Study	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	48
English	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	50
G Anatomy/Physiology	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	5	122
Mathematic	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	40
Physics	2	2	2	2	2	2	2	2	2	2	3	3	3	3	2	2	2	2	40
Meterial Technology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	40
P.O Theory	4	3	3	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	81
Workshop Technology	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	80
P.O Practical	11	11	11	10	10	9	9	9	9	9	8	8	9	11	10	11	11	12	178
Total Hours	37	37	37	37	37	38	38	38	38	38	38	38	38	38	38	38	38	38	**679**

Semester Two

Subject	Weeks																		Total Hours
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Religious Study	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2		48
English	1	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	50
G.Anatomy/Physiology	5	4	5	5	5	5	4	4	4	4	4	4	4	4	4	4	3	3	75
P.O. Theory	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	81
Technical drawing	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	80
P.O Practical	20	20	20	19	19	19	19	19	20	18	18	18	18	18	19	19	20	22	345
Total Hours	37	37	38	38	38	38	37	37	38	37	38	38	38	38	38	38	38	38	**679**

Semester Three

Subject	Weeks																		Total Hours
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
English	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	50
G.Pathology			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	80
P.O Theory	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5			80
Workshop/Management	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2				40
P.O Practical	27	27	22	22	22	22	22	22	22	21	23	23	21	20	22	23	27	27	415
Physiotherapy													1	2	2	3	3	3	14
Total Hour	38	38	38	38	38	38	38	38	38	37	38	38	37	37	38	38	37	37	**679**

Semester Four

Subject	Weeks																		Total Hours
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
G.Pathology	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2				40
P/O Theory	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	70
P/O Practical	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	32	31	31	549
Physiotherapy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	20
Total Hour/Week	37	37	38	38	38	38	38	38	38	38	38	38	38	38	38	37	37	37	**679**

Orthotic and Prosthetic Theory

A :- Orthotic Theory		**162**
A1: FOOT ORTHOTIC		
Orthotic principles		4
Prescription principles		5
Muscle strength		4
Neurology		3
Biomechanics		5
Anatomy of foot		3
Pathology of foot		4
Tests		5
Sub Total		**33**
A2:- KNEE ANKLE FOOT ORTHOSIS (AFO)		
AFO related pathology		10
Prescription principles		4
Patient assessment		5
AFO theory-measure,casting,rectification		5
Gait deviations		3
Polio orthotic tretment		2
Polio gait deviation		2
3point pressure systems		2
Tests		9
Sub Total		**42**
A3:- KNEE ANKLE FOOT ORTHOSIS (KAFO)		
Anatomy		4
Pathology		5
Clinical assessment		8
Biomechanics of lower limp		6
KAFO theory-measure,casting,rectification,tracing production		7
Tests		5
Sub Total		**35**
A4:- HIP KNEE ANKLE FOOT ORTHOSIS (HKAFO)		
Anatomy of hip		2
Pathology		3
HKAFO theory		4
Tests		3
Sub Total		**12**
A5:- SPINAL ORTHOTICS		
Functional Anatomy		3
Clinical assessment		2
Types of spinal orthosis		1
Low back pain		3
Fractures		2
Conventional		2
Plastic orthosis		4
Scoliosis management		3
Pathology		4
Cervical		1
Tests		4
Sub Total		**29**
A6:- UPPER LIMB ORTHOTICS		
Anatomy		2

Neurology		1
Pathology		1
Prescription		1
Patient assessment		1
Casting		1
Rectification		2
Biomechanics		2
Tests		
Sub Total		**11**
B:-Prosthetic Theory		**150**
B1:- BELOW KNEE PROSTHETICS		
Biomechanics		3
Amputation surgery		1
Surface Anatomy		1
Patient assessment		1
Casting procedure		1
Rectification		2
Socket materials		1
Component		2
Socket variations		1
Prescription principles		1
Nomal gait		6
Gait deviations		2
Alignment-Bench,static,dynamic		3
Alignment effects on socket pressure		1
Check out procedures		1
Prosthetic problems/socket changes		2
Tests		8
Sub Total		**37**
B2:- ANKLE DISARTICULATION		
Amputation surgery		1
Biomechanics		1
Casting procedure		1
Rectification		1
Socket materials/variations		1
Components		1
Alignment-Bench,static,dynamic		1
Fitting problems		1
Check out procedure		1
Prosthetic problems/socket change		1
Tests		3
Sub Total		**13**
B3:- ABOVE KNEE PROSTHETICS		
Amputation surgery		1
Biomechanics		5
Quadrilateral socket		2
Surface Anatomy		1
Patient assessment		3
Casting procedure		2
Rectification		2
Components		3
Socket variation		1
Prescription principles		2
Gait analysis/deviations		5

Harness design		1
Components		1
Tests		2
Sub Total		**8**
Workshop Technology		**80**
Introduction of Workshop Technology		
Layout		
Measurment		
Handsawing		
Chipping		
Files		
Scrapers and Drifts		
Screw Threads		
Threading Dies and Screw Tapping		
Assembling Tools		
Metal Fasteners		
Cutting Snip and Shears		
Hand Forging		
Granding Machine and Granding Wheels		
Lathe Machine its specification operation and safty measures		
Drilling Machines		
Bandsaw Machine		
Granding Machine		
Milling Machine		
Milling		
Router Machine		
Shaper Machine		
Belt sending Machine		
Compressers		
Workshop Management		**40**
Introduction to Workshop Management		
Principle of Costing		
Materials Aquisition		
Labour		
Financial Statements		
Store Stock Register		
Production Cost Calculation		
Specific Calculation related to orthopaedic Workshop		
Budgeting.		
General Anatomy and Physiology (Osteology, Arthrology Myology, Neuralogy)		**197**
System Of Body		
The Cell		
Tissue		
The Skin		
The Circulatory system		
The Lymphatic System		
The Digestive System		
Nuration		
Matalbolism		
The Urinary System		
The Respiratory System		
The Indocrine System		
Osteology		**29**
The Skeletin		

Nevertheless, provision of services in Afghanistan has greatly expanded in the last two decades. Before the Russians invaded in 1979 there was one orthopaedic workshop in Kabul and a handful of trained physiotherapists. We now have 140 qualified 2-year trained physiotherapists and 1-year trained physiotherapy assistants in Afghanistan and 11 orthopaedic centres. The physiotherapists work in hospitals, outpatient centres, outreach clinics and community based programmes. They have a dual role in the health system. Firstly in the curative sector - in post-surgical rehabilitation and treatment of patients with temporary or long-term disabilities. Secondly in prevention - physiotherapists now play an increasing role as educators to increase prevention of further disabilities and spread disability awareness. This is done through their interaction with local health workers, health educators and the local communities.

Many medical doctors and health actors in Afghanistan and Pakistan today are still unaware of what can be done to alleviate suffering for the disabled and non-disabled. We still need to improve understanding of the benefits of physiotherapy. For example, physiotherapists can train illiterate traditional birth attendants to recognise club feet in new-born children and refer them immediately to rehabilitation services for plaster casts which correct the deformity without need of surgery. Recently during the bombing in Afghanistan, some physiotherapists even found themselves a new role working as English translators for foreign journalists for over $100 a day!

Today in Afghanistan in orthopaedic technology we have 13 centres employing over 400 technicians, artisans and support staff. This experienced and competent workforce has been trained on the job in the last 15 years to meet the needs. As physiotherapy services have expanded so the orthopaedic workshops have had to increase the variety and complexity of orthoses for patients with polio, TB, scoliosis, and congenital deformities. The production of orthoses is now larger than that of prostheses for amputees.

The immediate need in this workshop is to review and standardise the training courses for both orthopaedic and physiotherapy technicians so that they have an official and professional standing in the health services in Afghanistan. We also need to make sure that rehabilitation services for the disabled are approached on a systematic basis nationally so that the rural areas are as well covered as the urban centres and that effective referral links are set up.

Finally, we must not forget the importance of socio-economic integration of the disabled in the community. As agencies we should practice positive discrimination on behalf of the disabled whenever possible, we should employ the disabled in our programmes, refer the disabled to vocational training schemes and encourage the government and humanitarian organisations to facilitate the integration of the disabled into society whenever possible. Every disabled child should be encouraged to go to school so that he has better chance of being trained for future employment as a disabled adult.

Socket test		1
Alignment-bench,static,dynamic		4
Check out procedures		1
Common socket problems		1
Tests		10
Sub Total		**44**
B4:- HIP DISARTICULATION		
Amputation surgery		1
Biomechanics		1
Surface Anatomy / patient assessment		1
Casting		1
Rectification		1
Socket variation / fabrication		1
Components		1
Gait deviations		1
Alignment		1
Check out		1
Prosthetic problems / socket changes		1
Tests		3
Sub Total		**14**
B5:- KNEE DISARTICULATION		
Amputation surgery		2
Biomechanics		2
Surface Anatomy		1
Patient assessment		1
Casting procedure		2
Retification		1
Components		1
Socket variation		1
Prescription principles		1
Alignment-bench,static,dynamic		1
Check out procedure		1
Common socket problems		1
Tests		4
Sub Total		**19**
B6:- PARTIAL FOOT PROSTHESIS		
Amputation surgery / levels		1
Biomechanics of normal foot function		1
Functional loss / special considerations		1
Biomechanical considerations for socket design		1
Bony Anatomy of foot		1
Prosthetic solutions / socket design		2
Patient assessment		1
Casting		1
Rectification		1
Alignment		1
Common problems		1
Tests		3
Sub Total		**15**
B6:- UPPER LIMB PROSTHETICS		
Patient assesement		1
Casting		1
Rectification		1
Biomechanics		1

Bone Tissue		
Type of bone		
Development of bone		
Bone remoulding (Pathology)		
Skull		
Vertibral Column		
Cervical Spine		
Thoracic Spine		
Lumber Spine		
Secrum and coccyx		
Thoracic		
Scapula		
Clavical		
Humerus		
Radius and Ulna		
Carpels,Metacarpels,Phalanges		
Pelvis		
Femur		
Tibia and Fibula		
Tarsals,Metatarsals,Phalanges		
Arthrology		**18**
Types of Joint		
Synovial joint structure and function		
Basic concepts of joint motion		
Arthrology of spine		
Curve of spine		
Movement of spine		
Ligament of spine		
Intervertable disk		
Shoulder girdle		
Elbow		
Wrist and hand		
Pelvis		
Fuction of pelvis		
Structure of pelvis		
Sacroiliac joint		
Pubic symphasis		
Hip joint		
Knee		
Tibiofemoral joint		
Movement of knee		
Patellofumoral joint		
Joint capsul		
Ligament of knee		
Bursa of knee		
Ankle and foot		
Function		
Joint		
Talocrural joint		
Subtalar joint		
Transverse tarsal joint		
Small joints of foot		
Fuctioning relation ship of foot and ankle		
Myology		**45**
Structure of skeletal muscle		
Micro anatomy		
Invervation		

Macro anatomy		
Classification of muscle action		
Changes to muscle tissue		
Specific anatomy (Origin insertion action)		
Muscle of neck		
Muscle of trunk		
Muscle of hip		
Muscle of knee		
Muscle of ankle		
Muscle of toe		
Muscle of shoulder		
Muscle of elbow and fore arm		
Muscle of wrist		
Muscle of fingers		
Respiratory muscle		
Neuralogy		**40**
Gross anatomy of nervious system		
Pattways of comunication		
Types of cell and their activities		
Nerve cell		
Neuralgia		
Conective tissue coverig		
Electrical activity of neurone		
Periphral nerve system		
Receptors		
Receptors Characteristic		
Cutateous receptors		
Joint receptors		
Visceral receptors		
Special sense		
Motor neurons and neuromuscular function		
Characteristic of peripheral nerves		
Major peripheral nerves and plexi		
Dermatomes and myanomes		
Sensory testing		
Cranial nerves		
Peripheral nerve lessions		
Central nervous system		
The spinal cord		
Tracts of the spinal cord		
Cell bodies of the spinal cord		
Spinal cord reflexes		
Brain stem		
Cerebellum		
Diencephalon		
Limbic system		
Basal ganglia		
Cerebal cortex		
Sensory system function		
Pain		
Motor system functioning		
Cortically Controlled (voluntary) movement		
Central programmed movement		
Mucscle tone		
Higher reflexes and reaction		
Autonomic nervous system		
Sympathetic system		

Parasympathetic system		
CNS lession		
CNC recovery		
Pathology		**120**
Review of Anatomy & Physiology Nerve system		
Cerebral palsy		
Stroke/CVA		
Muliple Sclerosis		
Poliomyelitis		
Spina bifida		
Spinal cord injuries		
Club foot		
Muscular Dystrophy		
Peripheral nerve lessions		
Rheumatoid arthritis		
Osteoarthritis		
Ankylosing spondylosis		
Osteomalacia		
Osteoporosis		
Osteomylitis		
Paget disease		
Back deformity		
Fracture		
Leprosy		
Diabetic Mellitis		
Burns		
Mathematics		**40**
Arhtematic review		
Algebra		
Plane Geomatry		
Trignomintary		
Victors		
Calculus		
Statistics		
Machanics		**40**
Scope of mechanics		
Unit of scalor and victors		
Quantities		
Force resulution and submition		
Law of force		
Movement		
Plane frame analysis		
Free body daigram		
Equation of equilibrium		
Newton's law		
Fraction and law of fractionn		
Linear and angular movement		
Acceleration		
Matirial technology		**40**
Properties of ferus and non ferus metals		
Heat treatment of steel		
Wood		
Leather		
Plastic		
Plaster of Paris		
Reenforce meterial		

Miscellinious (Ruber cork Adhesive etc)		
Technical Drawing	[illegible]	80
General elements of design		
Principle of drawing		
Veiwing projection		
Rules and standards		
Dimensioning fits and tolerance		
Drawing belowness orthosis		
Orthotic component		
Prosthetic component		
Orthosis		
Prosthosis		

Prepared by :-
Qamer Gul
SGAA
12th April 2002.

2. National Statistics in 2001 for Management of Physically Disabled - disabled, non-disabled and war trauma victims.

1	**North - East** Tarkhar, Badakshan, Baghlan, Kunduz (ICRC, SCA/CDAP)	1 Amputees/ war trauma - Prostheses	435
		2 Disabled from birth / acquired - Orthoses	454
		3 Disabled from birth / acquired - Physiotherapy	2,359
		Sub Total	**3,248**
		4 Non Disabled - Physiotherapy	4,731
		Total	**7,979**
2	**North** Mazar, Samangan, Jozjan (ICRC, SCA/CDAP)	1 Amputees/ war trauma - Prostheses	656
		2 Disabled from birth / acquired - Orthoses	1,260
		3 Disabled from birth / acquired - Physiotherapy	2,045
		Sub Total	**3,961**
		4 Non Disabled - Physiotherapy	2,114
		Total	**6,075**
3	**Centre** Kabul, Parwan (ICRC,KJRC, SGAA, IAM / MOPH, SERVE/EMAO)	1 Amputees/ war trauma - Prostheses	4,162
		2 Disabled from birth / acquired - Orthoses	3,832
		3 Disabled from birth / acquired - Physiotherapy	2,939
		Sub Total	**10,933**
		4 Non Disabled - Physiotherapy	2,876
		Total	**13,809**
4	**East** Nangarhar, Laghman , Kunar (SGAA, ICRC, SERVE/SHIP)	1 Amputees/ war trauma - Prostheses	1,518
		2 Disabled from birth / acquired - Orthoses	1,117
		3 Disabled from birth / acquired - Physiotherapy	3,296
		Sub Total	**5,931**
		4 Non Disabled - Physiotherapy	1,692
		Total	**7,623**
5	**West** Herat, Farah (ICRC, CDAP)	1 Amputees/ war trauma - Prostheses	576
		2 Disabled from birth / acquired - Orthoses	1,195
		3 Disabled from birth / acquired - Physiotherapy	2,453
		Sub Total	**4,224**
		4 Non Disabled - Physiotherapy	1,314
		Total	**5,538**
6	**South East** Kandahar, Ghazni, Pakhta , Logar, Wardak (HI, Guardians, KJRC, SCA/CDAP)	1 Amputees/ war trauma - Prostheses	1,060
		2 Disabled from birth / acquired - Orthoses	1,662
		3 Disabled from birth / acquired - Physiotherapy	2,490
		Sub Total	**5,212**
		4 Non Disabled - Physiotherapy	1,882
		Total	**7,094**
7	**Pakistan** N.W.F.P, Baluchistan. (PRCS, PIPOS, MCI)	1 Amputees/ war trauma - Prostheses	66
		2 Disabled from birth / acquired - Orthoses	734
		3 Disabled from birth / acquired - Physiotherapy	8,614
		Sub Total	**9,414**
		4 Non Disabled - Physiotherapy	2,106
		Total	**11,520**
		Grand Total	**59,638**

Physiotherapy Definitions: **Disabled from birth/acquired** = number of patients treated suffering from polio, CP, clubfoot, congenital conditions, **Non-disabled** = number of patients treated for fractures, dislocations, peripheral nerve injuries, arthritis, spondylosis and soft tissue injury.

3. Minutes of Physiotherapy Group

Members of the group agreed to follow the MOPH's requirements. This was that the Physiotherapy Assistant (PTA) training should be a one year training; that the Physiotherapy Teacher Training programme should be one year and that the Physiotherapy Training programme, currently two years, could be changed to three years in order to avoid physiotherapists having the same status as nurses and being obliged to do night duty in MOPH hospitals. Currently the two-year curriculum was being followed, however Lesley Dawson of the World Confederation of Physical Therapists (WCPT) had recommended the two-year course be upgraded to a three-year course as a result of her visit to IAM in 2000. The group also agreed that the entry level should be grade 12 for all courses but this should be flexible.

3.1 Discharge Criteria

After a lot of discussion it was decided to start with this topic and the following points were agreed.

- The involvement of a doctor in the discharge process is important.
- Referral to physiotherapy should denote good communication process between the doctor and the physiotherapist.
- Constant consultation with doctor or specialist and physiotherapist should be evident in the physiotherapist's notes.
- If there is no hospital or no doctor, e.g in rural area, then a patient from the street can be diagnosed and treated by a physiotherapist. It is important that in this case the physiotherapist must be an experienced person. It is important that MOPH has doctors in the rural areas and medical units for primary health care.

3.2 Training Materials

A comprehensive list of training materials should be exchanged between all the training organizations with their costs and the procedure of obtaining these training materials from source. **(Action: all agencies)**

3.3 Curriculum

Radiology:-

- Radiology hours should provide basic information about X-Rays and other methods such as CT scans, MNRI and echograms. The student should obtain further practical knowledge when looking at radiological information during ward rounds in intensive care or orthopaedic units.
- It need not be a separate subject but can be taught under orthopaedics or neurology.

Pharmacology:-

- The course content should teach the student to recognize commonly prescribed drugs, the classification of drugs, know their effects as well as common side-

effects and in the 3rd semester the student should learn "how to use the drug manual."

Public Health

- Public Health – 36 hours
  Students should understand the common health problems that are a hazard to the public – hepatitis, TB, malaria, Aids, drug abuse and epidemics of dysentery, diarrhoea and cholera and measures required to prevent these.
- SGAA has health educators trained separately to provide health messages to the public on common health problems.

Nursing Care and First Aid:
It was suggested that all the students should be able to take the vital signs and monitor them particularly in emergency cases. The present course has an outline (4.11) for this subject and therefore this should be added to it.

Lab Technology:
36-hours - knowledge of all commonly used laboratory tests and interpretation of all tests/ reports.

Growth and Development:
Growth and development will taught under neurology and it does not need extra hours and should not be an extra subject.

Basic Psychology First Year:
Basic psychology will be taught in the first year and in the second year applied psychology and social science following the psycho-social curriculum of Save the Children Sweden including counseling skills. Details and the number of hours will written up by SGAA.

3.4 Examination Procedures

- The pass grade for clinical exams must be 75% and in all subjects that have theory and practical, it will be 50% theory and 50% practical.

- The Examination will be monitored by members of IIME.

- Continuous assessment with written examinations (continuous assessment implies regular, periodic testing, as opposed to a single-end-of semester examination) could be 40% and the final exams will be 60%

- As the student will be promoted from 1st year to 2nd year, provided that have passed the continuous and final first year exams in the main subjects of Anatomy, Physiology, Pathology and basic Physiotherapy procedures. We will not take aggregate for all the subjects. More weighting (importance) will be given to these subjects. The final decision will be made when the task force next meet and each

organization will have their own rules and a common system will be decided upon or each organization will follow its own rules. SGAA in Jalalabad will have an examination board to decide on whether student can be promoted to the second year.

3.5. Use of Plaster-of -Paris (POP)

Handicap International said that they would send a video of plastering techniques for the management of CP children. How to deal with Emergency task force will decide.

3.6 Summary of Decisions

Practical Hours

- **The group agreed that there should be a distinction between practical hours of a subject and clinical education hours.**
- All the trainees should have experience in hospitals, orthopaedic workshops, outpatient physiotherapy clinics, CBR and community outreach. The practical hours would be 30 hours as according to the curriculum (10 theory and 20 practical). Mr. Razi Khan agreed to receive SGAA students in the CBR units of UNCDAP.
- For clinical education the format circulated by SGAA will need to be discussed at the next task force meeting in order to get 1,000 clinical education hours in the curriculum.
- Regarding the practical hours in the existing curriculum, Ms. Judy should bring more specification.

Evaluation of the Curriculum

- Formative evaluation should always be carried out at the end of the teaching of a major subject. The students will give feedback on a form of what they thought about understanding the subject and the method of teaching. The student's understanding of a subject can also be assessed by the exams. The teachers should also give feedback on whether the course content was logical, sequential and easy to teach to the calibre of students that they had.
- This will all be added together at the end of the year to do a summative evaluation.
- When the graduate qualifies the future employer should also provide feedback on the quality of the staff that we have trained. This will also depend on the type of work the physiotherapy graduate finds after graduating – in MOPH hospitals and NGO clinics we can expect feedback from hospital directors and managers. If the physiotherapists works in the private sector this feedback is less likely.

Objectives for the 3 year curriculum

Additional objectives for a 3 curriculum were circulated and a final decision will be made at the next task force meeting.

Up Grading the Physiotherapist from 2 years to 3 years:-

The group recommended that the current 2-year trained physiotherapist should be recognized as the same grade as a future 3-year trained physiotherapist provided they have experience. The group also decided that there is an urgent need for more physiotherapists in Afghanistan and therefore we should continue with the 2-year programme.

Physiotherapy Assistant Upgrading

The group decided that the date of the next PTA upgrading course would be decided at the next task force meeting.

Post Graduate Specialization

The group agreed that Post graduate specialization training is needed. The APA will select the new subjects. Archie Hinchcrliffe has already been informed about the need for a new Bobath training to update the recent advances in the Bobath method.

WCPT

Mrs. Paddie will ask WCPT to send a physiotherapists with developing countries experience to come and assess the standards of physiotherapy services in Afghanistan and to visit all physiotherapy centres.

4. Minutes of Orthopaedic Technology Group

The facilitator, Mr Qamar Gul, SGAA, welcomed those present and presented the agenda of the meeting. The members present regretted the fact that ICRC had decided not to attend the meeting.

4.1 Review of Task Force Activities since May 2000

Progress had been made but none of the targets laid out for the task force by the 2000 national workshop had been achieved in the given timeframe. These targets had been:

- Government recognition of the curriculum by the end of 2000 – **ongoing**
- Training materials to be developed by the end of year 2000 – **ongoing**
- Design of training courses by end of 2000 – **not started**
- Communicate a comprehensive interagency training package to CIDA for funding and technical support – **partially achieved** with a 2 week training for 18 technicians at Guardians in Kandahar by Ian Carrick funded by CIDA - June 2001
- Prepare a comprehensive list of candidates for this training **- achieved**.

Mr Qamar Gul presented a summary of the topics covered by the task force since the last national workshop The group reviewed the summary table (see Annex).

4.2 Training

As mentioned in the national workshop of May 2000, the priority of all organisations with orthopaedic workshops is to have their most experienced technicians obtain a nationally recognised level of competence. In order to achieve this there has to be a recognised training course for orthopaedic workshop technicians and an official grade and salary for them in the Afghan health system. Existing technicians could then take an upgrading course and exam to qualify for this grade under a grandfather type clause. There would have to be a cut off date for this (2005?) and then in future all new technicians would have to follow the official course. None of the agencies working in Afghanistan are currently in a position to set up a training school and indeed it is debatable whether a national training school is appropriate given the lack of resources of the Afghan authorities and the population of Afghanistan which is approximately 25 million. ISPO recommends a national school if the population is over 60 million. The war and lack of health services, however, has probably resulted in many more Afghans with physical disabilities then the international average. The recognition of a nationally approved curriculum is considered as the first step to providing a standard of qualified personnel in this field.
The level of training desired by the group is equivalent to that of ISPO Category 2 – technologist because technicians with this training are able prescribe appliances and cast and fit patients. A lower category of technicians – bench technicians – who do no have contact with the patient is also required in workshop which is equivalent to ISPO Category 3/4.

4.3 Curriculum

Regular Training - The group examined the curriculum which had been drawn up by the task force and presented to the Institute of Intermediate Medical Education in Kabul by

ICRC in 2001. The aim of the curriculum designed by the group is to produce an all round technician who can prescribe, cast and fabricate appliances for the patient correctly. The comment was made that if the group is aiming for the standard of ISPO Category 2 then ISPO's curriculum requires 3 years theory and 1 year practical. The present curriculum therefore did not have enough hours to be acceptable to ISPO. It was decided to review the curriculum anyway with the job description of a ISPO Category 2 technologist in mind. If possible the theory hours would be squeezed into two years with a third year for internship.

4.4 General Comments made on the curriculum:

1st YEAR

- Unfortunately there is a general bias in most prosthetist / orthotist curriculums towards prosthetics. This curriculum should reflect the extensive need for orthotics in Afghanistan and the wider range of pathologies served in orthotics. Orthotic hours should therefore be increased.
- Religious education should be decreased.
- Teaching hours for above knee and below knee should be inversed.
- More time should be given to pathologies.
- More time should be given to material technology (ie. resins, plastics, rubber, materials).
- P & O theory should be part of P & O practical and practical hours should be increased.
- Osteology, Arthrology and Myology Should reduced to combine in Anatomy/physiology.
- Techncial drawing should be included as a separate subject.
- Students should learn lower limb orthotics before upper limb. Likewise lower limb prosthetics before upper limb. There were also less through knees amputations seen.
- Physiotherapy hours should be introduced later, not in the first year.
- Intensive English language should be given in the first year.

2nd YEAR

- Religious hours should be decreased;
- Workshop management should also be introduced in the second/third year;
- English should be reduced;
- Anatomy, pathology, physiology etc should be called clinical orthopaedics in second/third year.

4.5 Revised Curriculum for Orthopaedic Technologist for 3 Years:-

- 1st year total hours 1,359 (theory 723 hours, practical 636 hours).
  The year is divided in semesters I and II - each semester is 18 weeks.
- 2nd year total hours 1,357 hours (theory 446 hours, practical 911 hours)
  The year is divided into semesters III and IV.
- 3rd year is internship in an orthopaedic workshop - total 1420 hours / practical
  The year is divided in semesters V and VI - each week 40 Hours.

4th National Disability Workshop

Physiotherapy Services
And
Orthopaedic Technology
in Afghanistan

27th and 28th February 2002
Peshawar

Sandy Gall's Afghanistan Appeal
45-D Syed Jamal - U- Din Afghani Road University Town Peshawar.
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Abbreviations:

ISPO	International Society for Prosthetists and Orthotists
WCPT	World Confederation of Physical Therapists
PT	Physiotherapist
PTA	Physiotherapist Assistant
MOPH	Ministry of Public Health (Afghanistan)
IIME	Intermediate Institute of Medical Education

Agencies

UNDP	United Nations Development Programme
WHO	World Health Organisation
UNICEF	United Nations Children's Fund
ICRC	International Committee of the Red Cross
SCA	Swedish Committee for Afghanistan
UNCDAP	United Nations Comprehensive Disabled Afghans Programme
KJRC	Kuwait Joint Relief Committee
SGAA	Sandy Gall's Afghanistan Appeal
IAM	International Assistance Mission
HI	Handicap International
PRCS	Pakistan Red Crescent Society
PIPOS	Pakistan Institute for Prosthetic and Orthotic Sciences
MCI	Mercy Corps International